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CLYDE FISHER

A LITTLE LAPP GIRL AND BIG LAPP DOG SQUINT INTO THE BRIGHT ARCTIC SUN (Bulletin No. 1)

Bulletin No. 1, February 28, 1949

Gold Rush Lends Color to Bleak Lapland

A GOLD rush in Lapland "resembling that in California many years ago" is adding new metal to the already high mineral output of that bleak far-north area. Although now popularly known as a land of reindeer and midnight sun, Lapland is an important producer of copper, and its Kiruna iron deposits are among the world's largest.

Europe's skullcap, as Lapland has been called, stretches from the Norway coast, through north Sweden and Finland, to Russia's White Sea—from Narvik to Murmansk and beyond. In all four countries live the Lapps, a seminomadic people who follow their reindeer herds (illustration, next page) across boundaries in search of fresh pasturage.

Reindeer Is Lapp's Coconut Palm

The Lapps are real-life counterparts of Scandinavia's legendary dwarfs. They usually are four and a half to five feet in height, stout, and of great physical strength. For warmth, they stuff their boots and gloves with grass.

The reindeer is to the Lapp what the coconut palm is to the South Sea islander—it provides food, shelter, and clothing. Lapps dress in reindeer skin, they eat reindeer meat and cheese, and drink reindeer milk. They use antlers and bone for tools, and sinews for thread. Because of the cold climate there is little agriculture in Lapland.

A reindeer eats about 27 pounds of white lichen—reindeer moss—a day. Since the lichen does not grow into pasturage again for several years, the deer must keep moving from place to place during the summer months. Consequently, Laplanders have few permanent villages, and no large towns. In summer, they live in crude tents while wandering over the wind-swept, grassy mountains along the Swedish-Norwegian frontier and the irregular shores of the Atlantic.

Native teachers live in these summer tent-villages and instruct the children (illustration, cover) of each group of nomads for the period they are in the locality. The more permanent villages in which Lapps spend the winter also have schools. A wooden church—usually Greek Orthodox or Lutheran—is a village fixture. Winter fairs are social events in the larger communities.

Lakes and Streams Serve as Roads

Fjords, headlands, valleys, glaciers, mountain lakes, and rivers characterize western Lapland. The eastern part of the country is low-lying and rugged, sprinkled with lakes, forests, and mosquito-infested swamps. The region above the Arctic Circle is treeless and consists mostly of frozen marshland and tundra.

Roads are few; lakes and streams provide the chief routes of travel, by rowboat in summer and reindeer sledge in winter. These waterways also provide the Lapps with trout, perch, pike, and salmon. On their

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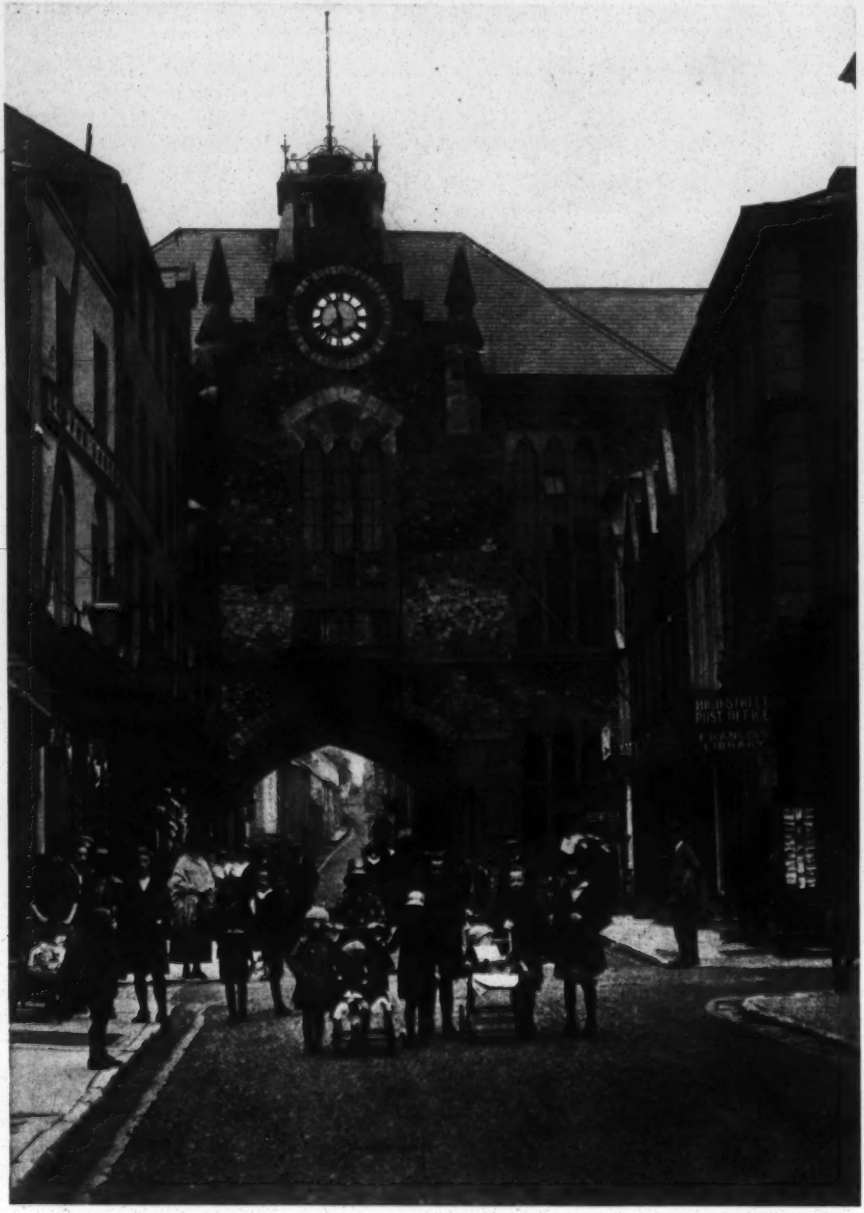

ROBERT REID

CAERNARVON'S MEDIEVAL-LOOKING EAST GATE AND GUILD HALL IS A FITTING INTRODUCTION TO THE QUAINT WELSH TOWN

Long known as the capital of north Wales (Bulletin No. 2), Caernarvon attracts thousands of visitors annually. They come to see the great castle where the first Prince of Wales reputedly was born, to climb near-by Mount Snowden (Wales's highest point), and to roam the narrow streets and study the ancient walls of the town itself.

Cardiff Seeks Recognition as Welsh Capital

SCOTLAND has its Edinburgh; the Republic of Ireland (formerly Eire) its Dublin; and Northern Ireland its Belfast, but Wales is unique among the important divisions of the British Isles in that it has no traditional, generally accepted capital.

The rising national spirit in Wales has brought to light an old dispute —the Welsh cannot agree which of the rocky peninsula's cities should be recognized as the capital. Cardiff, the largest and most important commercial city, has been the most persistent claimant of the honor.

Caernarvon Site of Song Festival

Cardiff lies in the industrialized, heavily populated, coal-mining southeast corner of Wales. Its inhabitants are regarded as unrepresentative Welshmen by the rural and village folk of north Wales who advance Caernarvon (illustration, inside cover) as their choice for a capital. Wrexham, also in north Wales, is another candidate for the position.

Caernarvon is a town of 8,500 persons on the strait separating northwest Wales from the island of Anglesey. It is on the main route of travel between London and Dublin. Its famous castle is the traditional birthplace of the first Prince of Wales. In the castle courtyard Welshmen meet every year for the *Eisteddfod*, a festival featuring the old songs, games, and legends of Wales.

But busy Cardiff is not without its castle and traditions. In the center of town stands a castle which was probably mentioned in the legends of King Arthur. In 1947 it was given to the city of Cardiff by the Marquess of Bute. The rambling pile was erected on the site of an ancient Roman fortification. Construction began about 1090 with the building of the Black Tower, and the castle gradually grew to its present dimensions.

Today Cardiff Castle is one of the show places of the British Isles. Millions of dollars have gone into its interior decorations of marble, oil paintings, murals, statuary, and other ornate carvings. Its 450 acres of parkland, meadow, lawns, and gardens, with the River Taff running through, will be developed as a social, cultural, and civic center.

Coal Mines Ten Miles from City

Cardiff's 223,000 inhabitants, though close to one of the world's busiest coalfields, live in a neatly kept town of wide streets, large parks, and imposing public buildings. Few cities of similar size have a city hall as palatial. The law courts building, the university, the county capitol, and the museum are all monumental buildings in the park setting surrounding the castle and its moat.

The coalfields are ten miles inland from the harbor. Except in the vicinity of the seven-mile dock-front, there is little to indicate that Cardiff is Great Britain's greatest coal-export port. The mines have a record output in excess of 50,000,000 tons a year, largely bituminous. But most of Europe's anthracite coal comes from this region too.

Besides coal, iron smelting and the development of steam power made

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shores grow edible berries. Grouse is common. Fur-trapping is profitable in some sections, especially in the huge Kola Peninsula which juts into the White Sea. South of the Arctic Circle grow evergreens and birches.

A climatic oddity is that ports on the Arctic Ocean are ice-free the year round because of the influence of the warm drift of water and air from the Gulf Stream, while winter temperatures in the inland area are among the lowest recorded anywhere in Europe. Most interior sections have average temperatures above freezing only five months a year.

Daylight is unbroken in summer for two to three months; in winter, darkness is continuous for an equal period. Many voyagers to the North Cape (Nordkapp) have enjoyed the novelty of sunshine at midnight.

Since Swedes, Russians, Finns, and Norwegians have ruled over the Lapps for centuries, the race gradually is losing its individuality. Russians and Swedes, through their churches, have exerted the most influence. They have Christianized a people that once believed in the use of magic drums to foretell the future.

Wildflowers present a kaleidoscope of color on Lapland's mountain slopes and valleys in summer. Of particular interest is the butterball, a golden flower similar to our buttercup except that it does not open out but remains in the form of a globe. In some Arctic zones, a reddish growth of algae on top of the snow causes it to appear pink.

NOTE: Lapland is shown on the National Geographic Society's map of Europe and the Near East. Write the Society, Washington 6, D. C., for a map price list.

For further information, see "Nomads of Arctic Lapland," in the *National Geographic Magazine* for November, 1939.* *(Issues marked with an asterisk are included in a special list of Magazines available to teachers in packets of ten for $1.00.)*

MRS. ALEXANDER GRAHAM BELL

WHILE BEING MILKED, THE HALF-WILD REINDEER IS HELD BY MR. LAPP: ONE BY ONE, HE LASSOS THE COWS OUT OF THE HERD SEEN AMONG THE TREE STUMPS IN THE BACKGROUND

Bulletin No. 3, February 28, 1949

Great Plains Life Is Struggle with Nature

NOT "too little and too late," but too little or too much is nature's way all too frequently in the Great Plains where Uncle Sam's "Operation Haylift" is writing a new chapter in Americana.

The drive by United States Air Force planes, and by Army bulldozers and snowshoe tractors, to open the roads and get supplies to blizzard-bound communities and starving livestock is taking place in a region known for extremes in summer heat as well as winter cold. The Great Plains extend north and south from border to border in a 300-mile-wide belt just east of the Rocky Mountains. Though non-mountainous, the region has an average elevation equal to that of the highest mountains in eastern United States.

Drought Constant Fear

Montana—just north and northwest of harder-hit Wyoming, South Dakota, and Nebraska—probably has the widest temperature range found in North America—from a high of more than 110 degrees Fahrenheit to lows that dip beneath the minus-50-degree mark. Other states falling partly within the Great Plains area are North Dakota, Colorado, Kansas, Oklahoma, New Mexico, and Texas.

Little and uneven rainfall is the bane of both rancher and farmer in these "great open spaces." A prolonged drought cycle is the constant fear. But prayers for rain are often more than answered. Then spring downpours or winter snows bring problems of harmful erosion as floodwaters sweep toward the Mississippi along "Old Muddy" Missouri and its tributaries.

High winds, too, blow dangerously over the heart-of-America country. In the days when this was the Indians' happy hunting ground, wind merely ruffled the tall, nutritious grasses that supported vast herds of roving buffalo. Even deep snow often aided the Indian hunter in getting around easily on his practical snowshoes, while the big beasts wallowed helplessly in the drifts.

In modern times, as increased food demands and prices led to overgrazing of the western plains and the plowing up of old protective grass, the high winds and drought combined to turn scenes of abundance into desolation. In parts of the Great Plains, three successive waves of settlements were forced out by severe droughts of the 1880's, the '90's, and the early 1900's.

Dust Storms Come

Nature's worst havoc came during the 1930's, spreading an American "dust bowl" from Texas to the Dakotas. Improved irrigation and dry-farming methods were of no avail against the long rainless periods. The winds picked up the loose, dried-out topsoil and literally blew it away in clouds of dust.

"Black blizzards" blotted out the sun. Drift soil and sand dunes not only covered fields and road but buried fences and houses. Cattle

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Cardiff one of Great Britain's fastest-growing cities. Early in the past century Cardiff's population was less than 2,000. A hundredfold increase took place in a little over a hundred years.

The first cargo of south Wales coal was exported in 1840. Market for the coal steadily spread to many parts of the world, and drew immigrants from many nations to Cardiff.

Inability of the north and south Welsh to agree on a capital site reflects the old, deep-seated rivalry between the two areas. The people of each section believe they speak the only pure Welsh and profess not to understand the other. Each camp regards itself as the true upholder of the ancient Welsh traditions.

The difference in temperament between the two groups was once described by Lloyd George, the Welshman who was Britain's World War I prime minister. He said the northerner "never loses his temper, never forgives or forgets injury, is stern, businesslike, commercially successful." The southerner he pictured as casual, emotional, and easily offended, and one who says what he thinks. "The North despises him as unthrifty and frivolous. I am South, my wife is North."

Lloyd George's wife, who was listening, at this point said, "You're the only South Welshman I could ever put up with."

NOTE: Wales is shown on the Society's map of the British Isles.

For further information, see "Wales in Wartime," in the *National Geographic Magazine*, June, 1944; "Sheep Dog Trials at Llangollen," April, 1940; "We Live Alone, and Like It," August, 1938*; and "A Short Visit to Wales," December, 1923; and, in the GEOGRAPHIC SCHOOL BULLETINS, November 18, 1946, "National Spirit Still Lives in Wales."

A. W. CUTLER

TURTLE-MEN OF THE RIVER TOWY USE THEIR "SHELLS" FOR BOATS WHILE SALMON FISHING

These vessels, called coracles, are like those used in the British Isles 2,000 years ago except that the covering is canvas instead of skin. The framework is made of ash and birch twigs. These south Welshmen use the businesslike clubs attached to the seats for killing fish when caught.

Bulletin No. 4, February 28, 1949

Figureheads Adorn New Norwegian Freighters

CAN a new day be dawning for ships figureheads?

Yes, comes the answer from Skagerrak. Shipbuilders at Oslo are putting heroic-size prow figures on streamlined motor freighters built for the far-flung trade of Norway's all-important merchant marine.

Twelve years ago a shipyard in the Norwegian capital set about disproving the theory that steel hulls and figureheads won't mix. For almost a century steel and steam had waxed in maritime commerce while sails and figureheads had steadily waned.

New Examples Rare

The Norwegians began in 1937 by fashioning a barefoot goddess in flowing robes and an armored knight for the prows of two sleek cargo ships. The war interrupted the renaissance, but now from the bow of one of the northern kingdom's newest vessels, a ten-foot Spanish *conquistador* scans the seas.

Elsewhere 20th-century figureheads are still rare. A bust of Joseph Conrad carved in 1935 guides an 87-year-old square-rigged sailing ship renamed for the author, and berthed at Mystic, Connecticut. A gold eagle adorns a three-master built at Hamburg, Germany, in 1936, used in United States Coast Guard training since the war. Eagles, emblems, and insignia, often merely painted on modern ship bows, are meager reminders of a long-popular custom.

Primitive sailors from ancient times have painted eyes on the stems of their craft. North American Indians built ocean-going canoes, prows bulging to suggest whales, and topped with figures of bears or other fierce animals of their ken. Phoenicians carved horse heads as symbols of speed. Romans evolved busts of their ablest warriors.

As merchant shipping expanded with the growth of Western maritime power, English and Dutch craftsmen developed the carving of lions in considerable variety. Spaniards made their figureheads in the likeness of saints. Gradually, the legend grew that a massive figurehead was a safeguard against disaster.

Patriotic Designs on American Ships

British carvers of the 18th and 19th centuries, vying in elaborateness of design, found their competition ably joined by Yankee embellishers of clipper ships. From lions, cherubs, and goblins, they turned to redskins, knights on chargers, characters from Scott and Shakespeare, and to living people ranging from shipowners to queens.

Franklin, Washington, Jefferson, Clay, Webster, and a host of others became carved giants on bows of ships bearing their names.

The *Constitution*—more familiarly known as "Old Ironsides"—fought the War of 1812 with no distinctive figurehead. However, the naval commander assigned to the ship in 1834 fitted a ten-foot Andrew Jackson to its prow. Miscreants with somewhat less admiration for "Old Hickory" beheaded the figure almost immediately, but a second Jackson likeness

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died or were shipped away; and thousands of ranch and farm families abandoned their homes.

Later cycles of good rainfall, along with conservation programs and new farm techniques, reduced the dust bowl and brought old areas back under cultivation. But agricultural experts warn of possible trouble ahead should drought strike again. A silver lining in the present clouds of loss and privation can be seen in the fact that the heavy snow will leave water reserves in regions which lately reported water shortages. For areas elsewhere, however, the threat of spring floods remains.

NOTE: The Great Plains may be located on the Society's map of The United States of America.

For further information about the plains region, see "Mapping the Nation's Breadbasket," in the *National Geographic Magazine* for June, 1948; "Carnival in San Antonio," December, 1947; "South Dakota Keeps Its West Wild," March, 1947; "These Missourians," March, 1946*; "Taming the Outlaw Missouri River," November, 1945*; "Grass Makes Wyoming Fat," August, 1945*; "Nebraska, the Cornhusker State," May, 1945*; "Yield of Texas," February, 1945*; "Down the Rio Grande," October, 1939; "Texas Delta of an American Nile," January, 1939*; "New Mexico Melodrama," May, 1938*; and "Speaking of Kansas," August, 1937*.

HAY ON THE SNOW AT OURAY, COLORADO, ENTICES SHY BIGHORNS DOWN FROM THE MOUNTAINS

Similar scenes are being repeated from Montana to Texas and from Nebraska to California as the nation struggles to save its livestock, wild and domestic, from the effects of one of the West's worst winters.

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Treasure-Trove in Millions Awaits Salvaging

NEWS of salvaging operations off New Zealand's North Island, to retrieve the last remaining gold ingots from the wreck of the liner *Niagara*, turns the spotlight on treasure-trove.

Since the war's end freed oceans and beaches to civilians, treasure hunting has become not merely a popular pastime but in some instances a full-time business. Webster defines treasure-trove as "Any money, bullion, or the like, found hidden, the owner of which is not known."

Both Land and Sea Fields for Treasure-seekers

Hidden treasure—sunk in the sea or buried in the land—has a double lure: adventure and riches. And the world is strewn with such opportunities—not only golden, but silver, and jeweled.

It is a matter of record that treasure worth countless millions lies in hundreds of sunken ships all along the world's coasts. There are the countless stories of lost gold mines, pirate loot buried ashore, and the cached payrolls of vanished and vanquished armies.

It takes very little to start a modern gold rush. On the river bank near Raritan Bay, inside Sandy Hook, New Jersey (once a popular refuge for pirates), in the spring of 1948 a lobsterman found gold coins minted in the mid-1700's. Amateur prospectors descended on the area like a swarm of locusts. Armed with shovels and hoes, they gouged the beach into a series of craters until state troopers were called out to save the property of the summer cottagers.

Thirty miles north of Sandy Hook, in New York's East River, the British frigate *Hussar* sank in 1780 with at least $4,000,000—pay for the British Redcoats. Numerous salvage attempts have failed although the *Hussar's* anchor was found in 1900 by divers hunting for another sunken ship. In the same year and the same river—in Hell Gate passage—the British frigate *Lexington* sank with a cargo of gold and silver bullion from Vera Cruz, Mexico. This has never been recovered.

Gold Eagles and Mexican Jewels Included among Possibilities

In 1798 the sloop of war *De Braak* sank a mile off Lewes, Delaware, during a sudden squall. All attempts to salvage its $15,000,000 cargo of precious metals have failed, although some Spanish coins were found on a near-by beach after a storm in 1936.

More recent additions to the list of shipwrecks in the same east-coast area are the British liner *Republic* which foundered off Nantucket in 1909, taking $3,000,000 in American "gold eagles" to a grave far too deep for salvage; and the liner *Merida*, which, in 1911, carried $5,000,000 in specie, bullion, and storied Mexican jewels to Davy Jones's locker, off Cape Charles, Virginia.

These are chicken-feed salvage prospects compared to some on the list. In Vigo Bay, Spain, allied British and Dutch fleets destroyed 16 Spanish galleons in 1702. Carried to the bottom was most of the estimated $150,000,000 loot they were bringing back from a Caribbean raid.

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served for 40 years. It now stands in the museum of the United States Naval Academy at Annapolis.

Old figureheads are prized display items in public and private marine collections (illustration, below) on both sides of the Atlantic. One of many on display at Mystic, Connecticut, is a Viking warrior with a three-inch cannon ball embedded in his forehead, possibly acquired from the Spanish Armada in 1588. Queen Victoria, the Queen of Sheba, and Columbia robed in stars and stripes adorn the walls of the Mariners' Museum near Newport News, Virginia.

"The Lookout" at Gravesend, England, counting 82 rare figureheads, has one of the largest collections. Some two dozen displayed in the Tresco Abbey gardens on the Scilly Islands are from ships which came to grief along the islands' rocky shores.

NOTE: For additional information on ships and shipbuilding, see "Norway, an Active Ally," in the *National Geographic Magazine* for March, 1943*; "Ships, from Dugouts to Dreadnoughts," (including 16 full-page etchings of ships), January, 1938*; and "Where the Sailing Ship Survives (Aland Islands)," January, 1935.

JOHN E. FLETCHER

THREE FIGUREHEADS ADD TO THE NAUTICAL FLAVOR OF PEABODY MUSEUM, SALEM, MASSACHUSETTS

In the heyday of Salem's clipper ships, this show place of maritime relics and oddities began as the East India Marine Society. Membership was open only to those who had sailed beyond the Cape of Good Hope or Cape Horn. Members were encouraged to bring back "natural and artificial curiosities" to fill the halls of their museum. George Peabody, London banker and philanthropist who was born near Salem, later endowed the institution.

Salvage crews of many nations recovered only a small part of the cargo.

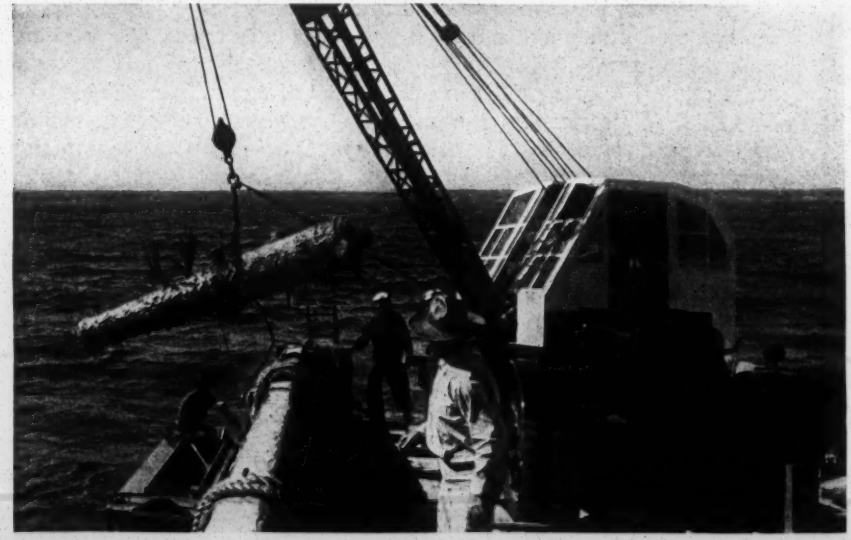
Of about the same value were gold, silver, and jewels lost when a West Indies hurricane drove 16 other Spanish ships onto a reef north of the island of Hispaniola in 1643. His success in salvaging a fraction of this treasure in 1687 led to Captain William Phips's appointment as Governor of Massachusetts Bay Colony.

A hurricane sent 14 Spanish ships and $65,000,000 in treasure down off Long Cay, Florida, in 1715. This reef-strewn sea stretch south of Florida has been called a "graveyard of ships." Privateers, Spanish galleons, and British warships have been wrecked in its waters. Treasure-trove to a historian were the coral-encrusted cannon salvaged from the wreck of one of the latter (illustration, below).

Since Coronado wandered over the Southwest seeking the Seven Cities of Cibola in the 16th century, treasure hunters have been lured to this region. Among their objectives have been gold mines abandoned because of hostile Indians, the payroll of a Mexican army defeated at Palo Alto, and $2,000,000 the James brothers hid to tide them over a rainy day, and then couldn't find themselves.

Nova Scotia, Cape Cod, the Galapagos Islands off Ecuador, and Cocos off Costa Rica are fertile areas for treasure hunts. Charts found in old sea chests, supposedly left by such famous pirates as Blackbeard and Captain Kidd, or by a modern prospector's grandfather, are the road maps which guide many of these present-day adventurers.

NOTE: On the Society's World Map may be located the spots where prospectors, both amateur and professional, seek treasure-trove.



CHARLES H. BAKER, JR.

AFTER 250 YEARS, SEAS OFF THE FLORIDA COAST GIVE UP THE GUNS OF A BRITISH WARSHIP

Treasure-seekers who salvaged the guns of H.M.S. Winchester were not out for pirate loot. They signed an agreement stating that their project was "not primarily for monetary gain but for the love of adventure and the preservation of historical relics." Clues from the guns, checked with British Admiralty records, identified the wreck although every part of the ship had disintegrated.